

App. No. 10/792,003

Reply to Office action of June 30, 2005

**REMARKS/ARGUMENTS****A. Summary of the Amendment**

This is a full and timely response to the non-final Office Action dated June 30, 2005. Reexamination and reconsideration are courteously requested. By way of the present amendment, claims 1, 10, 12 to 14, 16, 34, and 37 are amended. Further, claims 41 to 43 are added and claims 7 to 9, 11, 15, and 17 are canceled. Thus, claims 1 to 6, 10, 12 to 14, 16, and 18 to 43 are pending for the Examiner's consideration upon entry of this amendment, with claims 1, 10, 16, 18, 30, 31, and 41 being independent claims.

**B. Allowable Subject Matter**

The Examiner has acknowledged that claims 16, 18 to 21, and 24 to 33 are allowed. Applicants thank the Examiner for a thorough examination of these claims. It is also respectfully noted that claims 22 to 23 are not rejected under any statute, or objected to for any informalities. Unless the Examiner raises a new rejection of claims 22 to 23, it is therefore submitted that claims 16, and 18 to 33 are allowed.

**C. Rejections Under 35 U.S.C. § 112, Second Paragraph**

Claims 34 to 40 are rejected as being indefinite for failing to recite definitions for M and X in the formula  $M\text{CrAlYX}$ . The present amendment provides such definitions, and it is requested that the indefiniteness rejections be withdrawn in view of the amendment.

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D. Double Patenting Rejections

The double patenting rejections relating to claims 15 and 17 are rendered moot by way of the present amendment canceling claims 15 and 17.

Regarding the obviousness-type double patenting rejection of claims 10 to 14 (claims 10, and 12 to 14 upon entry of the present amendment) as being unpatentable over claims 15 to 17 and 23 to 25 of copending Application No. 11/013,218, the provisional rejection is acknowledged. It is understood that upon withdrawal of the remaining rejections, the obviousness-type double patenting rejection will be withdrawn unless the copending application has issued as a patent.

E. Rejections Under 35 U.S.C. § 102

Claims 1 to 9, and 11 are rejected as being anticipated by U.S. Patent No. 5,455,119 ("Taylor"). The rejections of claims 1 to 9 are respectfully traversed, and the rejection of claim 11 is rendered moot by the cancellation of claim 11 in the present amendment.

Independent claim 1 recites a nickel based coating comprising the alloy composition MCrAlYX wherein X comprises at least four members of the group consisting of Pt, Hf, Si, Zr, Ta, Re, and Ru; and wherein the weight percentage of X to the total composition is within the range of about 0.1% to about 28.0%. In contrast, Taylor only teaches that X can be selected from the group consisting of three elements, namely, Ta, Pt, and Re (col. 4, lines 50 to 60). Taylor makes no mention of Si, Hf, Zr, or Ru, one of which must be included in the composition according to claim 1. In view of this deficiency in the teachings of Taylor, it is respectfully requested that the rejections of claims 1 to 9 be withdrawn.

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Claims 34 to 40 are rejected as being anticipated by U.S. Patent No. 4,152,488

("Schilke"). The rejections are respectfully traversed in view of the present amendment.

Independent claim 34 recites a turbine blade comprising having a tip with a coated region thereon, wherein the coated region comprises a coating composition represented by the formula  $MCrAlYX$ , wherein M comprises at least one member of the group consisting of Ni, Co, and Fe, X comprises a combination of at least Hf and Si, and the weight percentage of X to the total composition is within the range of about 0.1% to about 28.0%. Shilke discloses the alloy  $NiCrAlYT_a$  as a tip element on turbine blades, and further teaches that up to one half of the Y content may be replaced with Hf. However, Shilke fails to disclose the inclusion of Si in the alloy. Consequently, it is respectfully requested that the rejection of claims 34 to 40 be withdrawn.

#### F. Conclusion

In view of Applicant's amendments and remarks, it is respectfully submitted that Examiner's objections and rejections have been overcome. Accordingly, Applicants respectfully submit that the application is now in condition for allowance, and such allowance is therefore earnestly requested. Should the Examiner have any questions or wish to further discuss this application, Applicants request that the Examiner contact the Applicants attorneys at the below-listed telephone number.

If for some reason Applicants have not requested a sufficient extension and/or have not paid a sufficient fee for this response and/or for the extension necessary to prevent abandonment on this application, please consider this as a request for an extension for the required time

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period and/or authorization to charge Deposit Account No. 50-2091 for any fee which may be due.

Respectfully submitted,

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Dated: Aug. 31, 2005

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